

## CLAIMS AMMENDMENTS

Claim 1 (Currently ammended) What we claim as our invention is:

A continuous flow psychrophilic anaerobic digester, micro-filtration integrated aquaculture waste treatment system comprised of:

- a. an anaerobic digester to capture waste, fitted with augers to mix digested slurry with waste stream.
- b. valves to control the flow of effluent to allow sludge to settle before effluent is released.
- c. micro-filter to filter solids and pathogens from effluent
- ~~d. aquatic plants for filtering of effluent~~

Claim 2 (Current) A system according to claim 1 where valve for effluent is closed before receiving waste stream

Claim 3 (current) A system according to claim 1 where waste is mixed daily with augers.

Claim 4 (current) A system according to Claim 1, where waste is allowed to settle atleast eight hours before opening valve to allow effluent to flow out.

Claim 5 (current) A system that converts existing manure pits, lagoons, into anaerobic digesters by covering the pit with an airtight diaphragm secured to a concrete beam where diaphragm is kept under a negative pressure.

Claim 6 (current) A system according to claim 5 that protects against environmental contamination by removing the danger of the diaphragm being lifted by bio-gasses, in flodstage

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Claim 7(current)A system according to claim 5 where concrete beam is plumbed to receive waste , to pump off bio-gas ,to provide for effluent over-flow , and to remove finished slurry.

Claim 8 (current) A system according to claim 5 where bio-gas is pumped off into storage and an emergency photovoltaic pump located on vent is used during flood stage.

Claim 9(currently ammended)A system of effluent overflow  
~~aquatic plant filtering of effluent~~ the system comprised of:

- a. a canal adjacent to digester
- b. canal is lined and covered with a greenhouse
- ~~c. an overhead conveyor harvester~~

Claim10 (current)A system according to claim 9 where canal is lined to prevent ground water contamination.

Claim 11(withdrawn)A system according to claim9 where nutrient rich effluent flows into 1 end of canal and purified water out other end.

Claim 12(withdrawn)A system according to claim 9 that removes nutrients and antibiotics by filtering with the use of aquatic pakts.

Claim 13(withdrawn) A system according to claim 9 where greenhouse is used to prevent the spread of aquatic plants into ecosystem

Claim 14 (withdrawn)A system according to claim 9 where green-



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HOUSE

houseis used to protect aquatic plants from climate.

Claim 15 (withdrawn) A system according to claim 8 where harvester is suspended from green house to harvest aquatic plants.

Claim 16(withdrawn ) A system according to claim9 where harvester is of a conveyor type system.

Claim17(withdrawn) A system according to claim 12 where aquatic plants used as feed decreases the amount of antibiotics administered to animals.

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